



# Rail Project 101 - West

May 12, 2016



# 20 Miles – 21 Stations



# History Slide

- West Oahu Farrington Highway guideway awarded November 11, 2009
- Kamehameha Highway guideway awarded June 30, 2011
- Maintenance and Storage Facility awarded June 30, 2011
- Construction placed on hold August 2012
  - due to Kaleikini vs Wayne Yoshioka et al
- Construction resumes September 2013

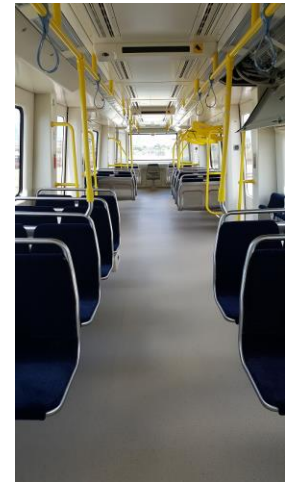
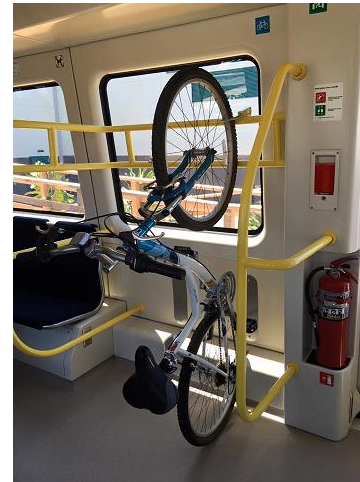
# Alignment Video





# System & Rail Vehicle Features

- Operates 4 AM to Midnight
- Trains every 5 min. to 11 min.
- 30 mph to 55 mph
- Integrated with TheBus
- Cultural motifs & artwork
- Four car train: 190 seats, 8 wheelchair areas
- Flip up seats for more wheelchair areas
- Space for luggage, motorized wheelchairs, strollers, surf boards, bikes
- Audible & visual messages inside vehicle
- Emergency phones in vehicles & stations
- Accessible gangways to all four cars



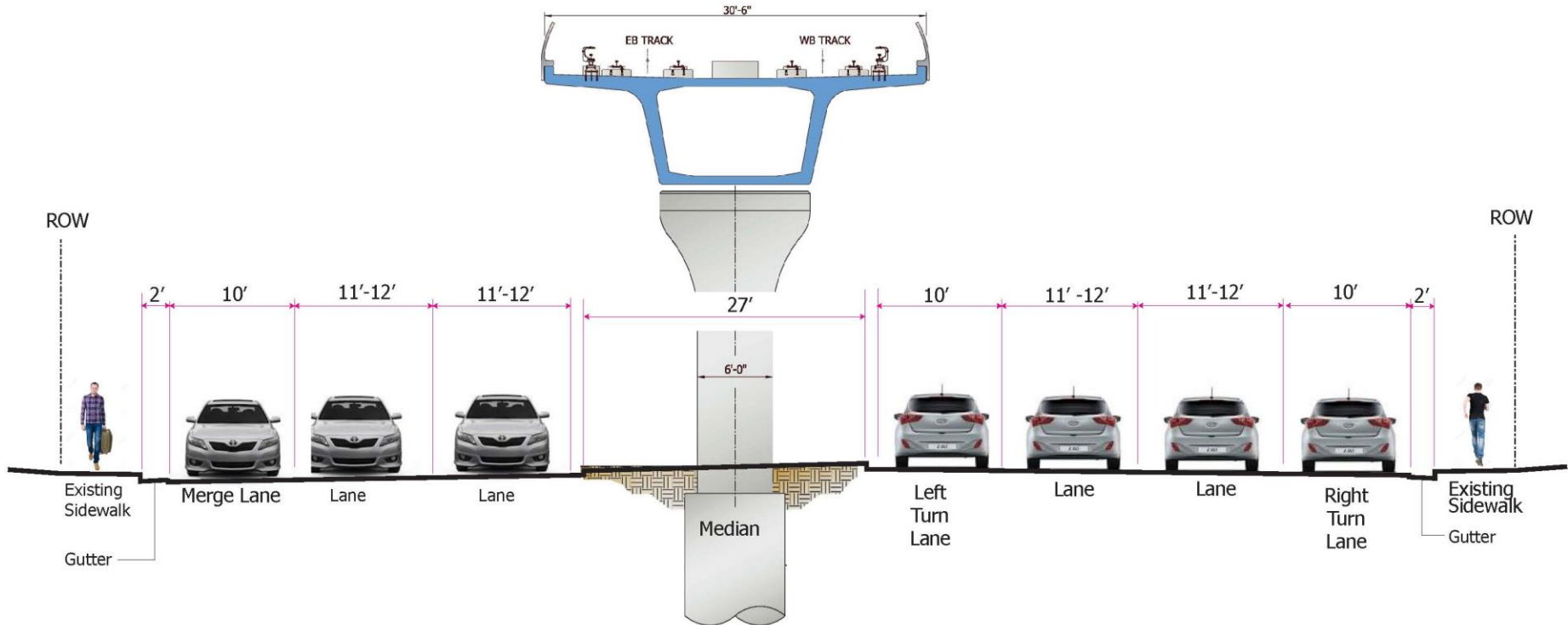
# Safety Features: Platform Screen Gates

- Level Boarding
- Automatic Platform Safety Gates 5 feet high
- Audible signal and light when doors open
- Open simultaneous with rail vehicle doors
- Truncated Domes at gate openings, safety yellow for contrast
- Computer controlled, opens only when train is parked at station



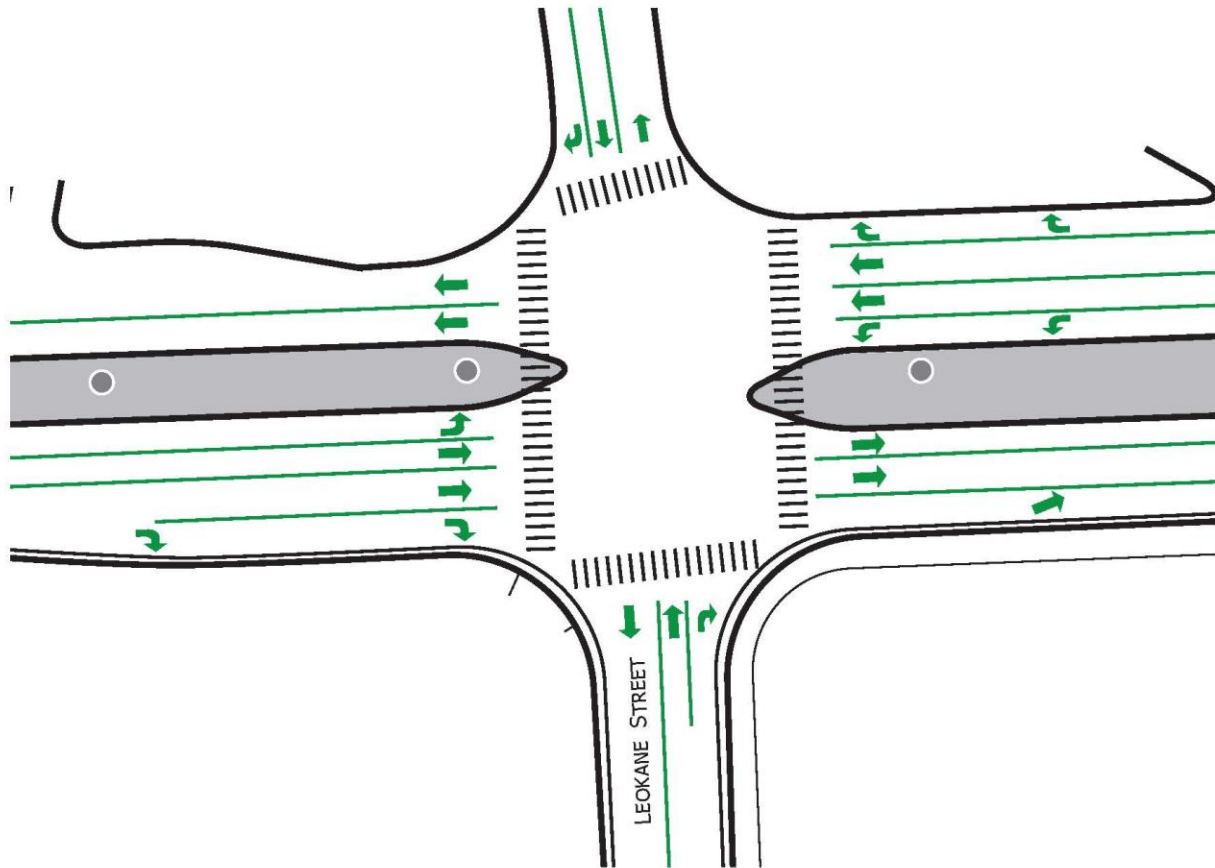
# General Design Concepts

# Typical Roadway Section Along Farrington Highway





# Intersection at Leokane St., Waipahu



**Farrington Highway  
U- Turns**

**Leole St.  
Both Directions**

**Aniani Pl.  
WB to EB**

**Leokane St.  
WB to EB**

**Waipahu Depot  
St.  
Both Directions**

**Pupukahi St.  
Both Directions**

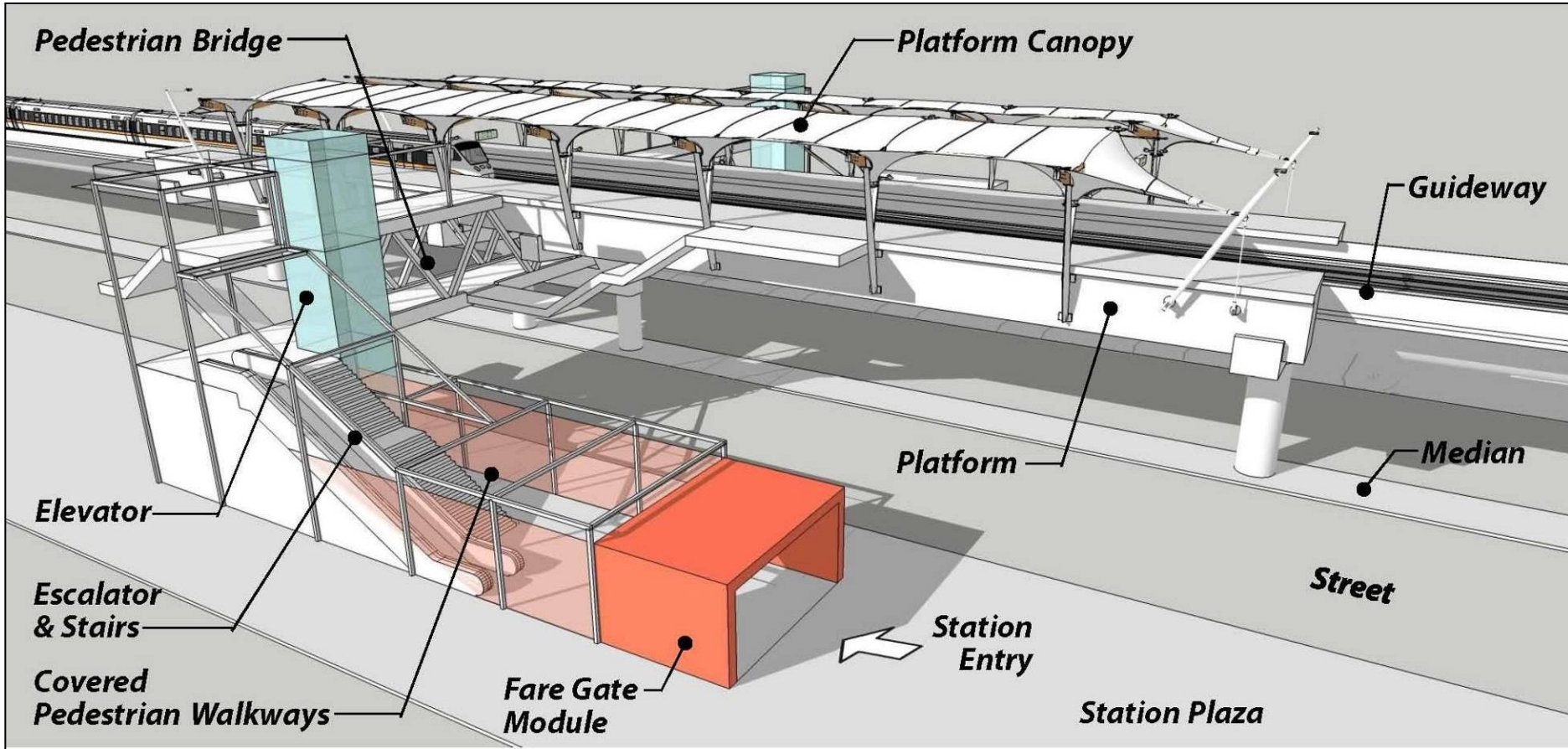
**Paiwa St.  
Both Directions**

**Pupupuhi St  
WB to EB**

**Kahualii St  
WB to EB**

# Station Diagram

## Side Platform





# East Kapolei Station





# University of Hawai'i West O'ahu Station





# Ho'opili Station



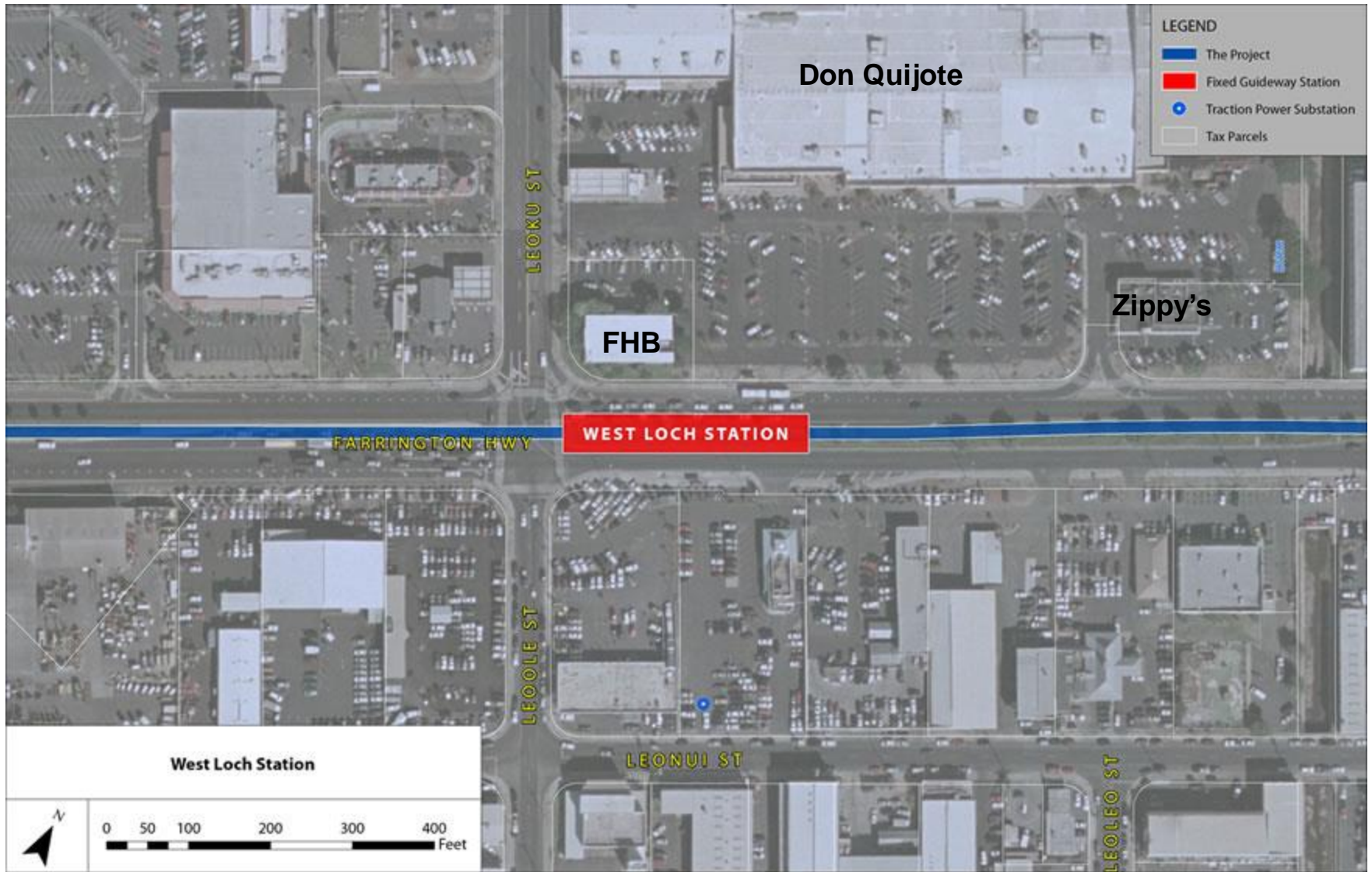
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# West Loch Station





# West Loch Station

## Looking Makai



# Waipahu Station Site Context





# Waipahu Transit Center Station

## Looking Makai





# Leeward Community College Site Context



# Leeward Community College Station



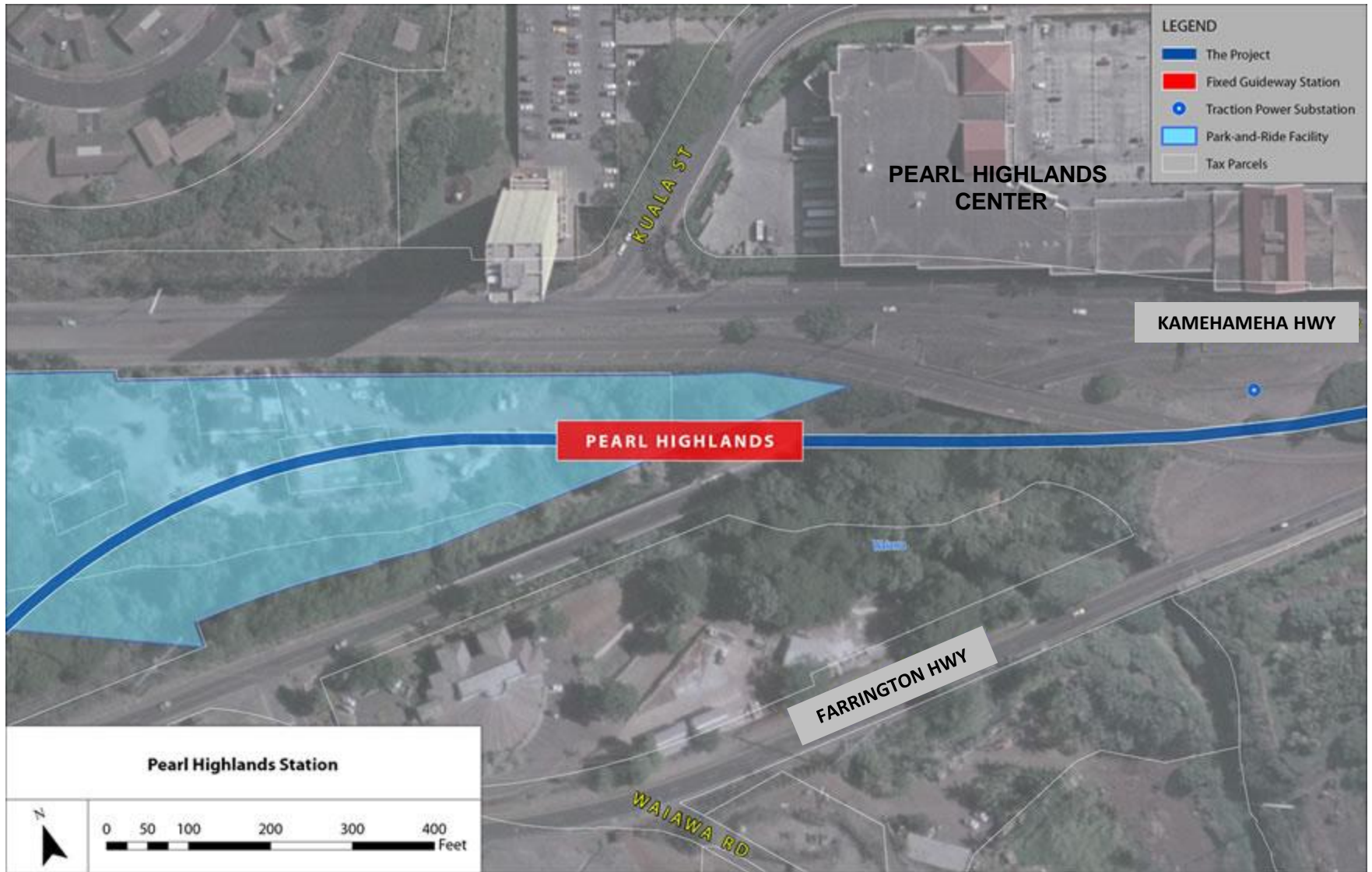
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# Pearl Highlands Station





# Pearl Highlands Station





# Pearlridge Station



# Pearlridge Station

## Looking Makai





# Aloha Stadium Station





# Aloha Stadium Station

## Looking Makai





# Aesthetic Column Program

*The history and stories that celebrate the past while acknowledging the present day existence that surrounds each station site...*



Ho'opili Station

# Station Art Program

## Art Opportunity Categories

- Paving and Floor Designs
- Platform Glass Windscreens
- Wall Murals and Low reliefs
- Grille and Artistic Fencing
- Art Glass Windows
- Attached Architectural Elements



*See It Split, See It Change*, by Doug & Mike Starn,  
Fused glass panels & stainless steel fence  
South Ferry Station, 1 line, MTA - New York City Transit

## Types of materials

- Metal
- Stone
- Glass
- Concrete
- Ceramic
- Mosaic tile
- Other durable materials impervious to environmental conditions



*Shad Crossing* by Ming Fay  
Glass mosaic  
Delancey Street-Essex Street, MTA, New York City Transit



# Construction Activities

# Utility Relocations

WOFH SEGMENT	
Utility Type	Linear Feet
Electrical and Communications	21,400
Water	9,300
Drainage	5,200
Sewer	600
Gas	1,600



KHG SEGMENT	
Utility Type	Linear Feet
Electrical and Communications	19,500
Water	4,400
Drainage	1,500
Sewer	500
Gas	12,600





# Utility Relocations





# Utility Relocations



*Utility work on Kamehameha Highway near Pearl Harbor*



# Utility Relocations





# Drilled Shaft Work





# Drilled Shaft Work





# Column Construction





# Drilled Column Shaft Construction



# Column Construction





# Guideway Installation





# Guideway Installation





# Guideway Installation





# Guideway Installation





# Guideway Installation

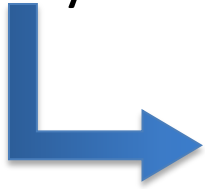


# West Construction

## General Sequence

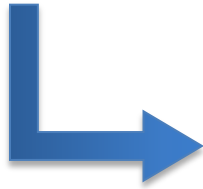
6 to 9 months

Utility Relocations



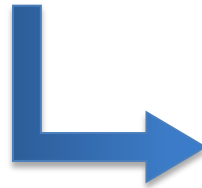
1 to 2 months

Shaft Foundations



1 to 2 months

Column Construction



1 to 2 months

Guideway Installation



# Business Outreach Programs

## ■ Open for Business

- Special signage, collateral and programs
- Access to and from businesses maintained
- Timely construction information
- Coordination with businesses on deliveries, etc.
- Monthly business and community meetings



# Business Outreach Programs

## ■ HART Business Alliance

- Partnership with businesses along the corridor
- Tailored briefings and meetings
- Direct emails with information on traffic, construction and outreach programs
- Business development programs, marketing and social media workshops
- Proactively meeting with businesses in the Dillingham and City Center area
- Program partners include:
  - Hawaii Small Business Development Center
  - U.S. Small Business Administration – Hawaii District Office
  - Patsy T. Mink Center for Business and Leadership
  - Chamber of Commerce Hawaii





- Discount program open to all businesses within a half-mile of the route
- More than 100 businesses participating
- Discounts available at [www.ShopAndDineOnTheLine.com](http://www.ShopAndDineOnTheLine.com), through social media and printed brochures
- Partnerships with visitor attractions, Chamber of Commerce Hawaii, local trade unions, media and others to encourage support

# *Mahalo!*



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